



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY



Teagasc College of Amenity Horticulture National Botanic Gardens



Part-Time
Course Guide

2021/2022



A warm welcome to Teagasc College of Amenity Horticulture. We hope that you find this prospectus both insightful and informative.

We are continuing a strong and proud tradition of training horticulturists, a practise that has gone on for over 200 years at the National Botanic Gardens in Glasnevin. The College is privileged to partner with the OPW who run the gardens in the training of students in Horticulture. Our graduates are found in every corner of the world practising their trade and continually learning.

The science of horticulture is ever changing and in the Teagasc College of Amenity Horticulture we can provide the building blocks that will open new horizons. All of our courses are run in the National Botanic Gardens in Glasnevin and in our new campus in the grounds at Teagasc Ashtown. We have access to the National Botanic Gardens each day and we also have state of the art lecture theatres that were opened in 2014. It's a great time to be involved in the industry as more and more horticultural companies are looking to expand and take on well-trained, highly qualified employees. The essence of what we do centres around plant knowledge and the Botanic Gardens holds the premier living plant collection in Ireland. Across every course, students spend a considerable period of time in the gardens viewing plants and being tutored on the plant collections and uses.

In this booklet you will find a wealth of information dealing with specific courses from Certificate level 5 through to Degree level 7. All of our major and minor awards programmes are validated under QQI (Quality Qualifications Ireland). If all you want to do is learn plant names then we have the course for you but if you want to develop a full career qualification then this is the place for you also. In short, we have the course to fulfil all horticulture training requirements. Over the years we have developed strong industry links and we are also involved in providing specific tailored training and Continuous Professional Development to the Horticulture sector.

We are dedicated to promote the business of learning in horticulture across all levels and with all interested individuals.

If you have any specific queries on any information contained herein please don't hesitate to contact us. Why not visit us at the National Botanic Gardens. You are guaranteed a wonderful experience, one that could change your life.

John Mulhern
Principal, Teagasc College of Amenity Horticulture
National Botanic Gardens





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changing and in the College of
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John Mulhern, College Principal

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Overview of the Botanic Gardens and College

Our College provides full time courses at QQI Level 5 and QQI Advanced Certificate Level 6. These courses are awarded by QQI (Quality and Qualifications Ireland). This ensures that all our students are provided with training that is at the highest quality in educational standards. Our courses run from both The National Botanic Gardens and also at our new campus in the grounds at Teagasc Ashtown.

National Botanic Gardens

The College of Amenity Horticulture is located at The National Botanic Gardens. It is Ireland's premier botanical and horticultural establishment. It occupies a beautiful 19 hectares site with the Tolka River forming the northern boundary. It contains over 20,000 plant species and cultivars including many exceptional specimens.

There is a long tradition of horticulture training at the National Botanic Gardens since 1812. Over the last 200 years the training courses at the Botanic Gardens have evolved to meet the needs of the day.

The college works closely with the OPW staff of the gardens to ensure that students receive a comprehensive training in all aspects of horticulture.

Our courses involve both class work, skills training and practical learning which give our students a broader understanding of horticulture.

Teagasc College Campus, Ashtown

The college campus was opened in 2016 and provides facilities for students to undertake practical training in Horticulture in the following areas:

- Landscaping
- Nursery
- Fruit & Vegetable Production
- Mechanisation
- Sportsturf



Part-Time Courses Overview

Part time courses or component awards allow learners to select individual subjects in Horticulture from any of our major awards at Level 5, 6 or 7. These courses are intended for prospective students who are currently employed in the horticulture industry and who wish to further their career development in their chosen sector. At level 5 they can be pursued by individuals as taster modules to identify if further engagement in Horticulture is warranted or desired.

These courses will enable the student to develop a greater understanding of the sciences underpinning their chosen sector, and will also help them improve their skills and competence at a practical level.

These courses are offered at a time and in a manner to best meet the demands of the horticulture industry. They are offered over the academic year during which time students will undertake a full programme of both academic and practical training.

As well as providing the learner with a taste of 3rd level training in their chosen sector, these courses will equip the learner with the knowledge skill and competence relevant to the sector in which they are employed.

The full listing of modules is available in this booklet.

Further information and future course availability can be got directly from the college.

Blended Learning Options

Options will be available for virtual engagement of classroom teaching sessions. Practicals in all sessions must be attended for training and assessment.

Course Summary

The Teagasc college at the National Botanic Gardens, Glasnevin are offering a QQI Level 5 component award in Biodiversity and the Natural Environment which will equip the learner with the knowledge, skills and competence to value the natural environment as a sustainable resource. The course will lead to a minor award at NFQ level 5 in Biodiversity and the Natural Environment.

Who should Apply?

This course is designed for people who are currently pursuing careers in Horticulture or other similar disciplines.

This subject is worth 15 credits which can be counted towards further studies at Level 5. By taking other Level 5 modules, students may be able to build towards a full major award of QQI Level 5 Certificate in Horticulture.

Module Content

On completion of this module, students will be able to:

- Explain environmental terminology.
- Describe the role of water quality.
- Describe the effects of human activity on the environment.
- Explain the role of biodiversity.
- Review the Wildlife Act.
- Describe a habitat using tools
- Prepare an environmental survey

Course Structure

The course will be offered in a one day session over a 10 week period from January to March. Each session will comprise of lectures and hands-on practical / demonstration exercises. Skills learned throughout the year will be assessed at regular intervals. Students will be supplied with appropriate PPE (Personal Protection Equipment) but they will be required to have safety boots and appropriate work trousers for each of the practical / demonstration sessions. Please contact the college of your choice for precise details on the course structure, delivery and current fees.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

Teagasc College of Amenity Horticulture provides a QQI Level 5 Component Award in Fruit and Vegetable production. It will equip the learner with the knowledge, skill and competence to grow and manage a wide range of fruit and vegetables across all seasons. This course will lead to a minor award at NFQ Level 5 in Fruit and Vegetable Production (5N2552).

Who Should Apply?

This course is designed for anyone who wants to deepen their knowledge of the production of many food crops or for those who just have a general interest in horticulture. It affords the opportunity to study an area of horticulture on a part-time basis while gaining an approved Level 5 minor award. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture. This module will be delivered at the College campus at Teagasc, Ashtown, Dublin 15.

Module Content

On completion of this module, students will be able to:

- Explain key factors affecting fruit and vegetable production
- Identify a range of fruit and vegetable crops
- Describe pollination
- Explain fruit and vegetable nutrition
- Describe common problems of fruit & vegetables & controls
- Implement a range of skills and husbandry practices associated with vegetables
- Compile a fruit and vegetable programme

Duration

The course will be offered in one 3 hour session per week over a 28 week period commencing in early September and running through to mid-May. Students will be required to perform a range of operations that are appropriate to fruit and vegetable production using safe work practices in the Teagasc Ashtown. Skills learned during the course will be assessed regularly by College personnel. Check with College for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>



QQI Level 5 - Component Award Horticulture Mechanisation

Course Summary

The QQI level 5 component award in Horticultural Mechanisation will equip the learner with the knowledge, skill and competence to operate and maintain a range of hand and powered horticultural machinery and implements. This course will lead to a minor award at NFQ Level 5 in Horticulture Mechanisation (5N259).

Who Should Apply?

This course is designed for people currently pursuing careers in any horticulture sector and for those who wish to further their knowledge and experience of the safe use and maintenance of a wide range of hand and pedestrian operated equipment used in the sector. This module offers participants a chance to study at the Teagasc College, National Botanic Gardens. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture. Part of this module will be delivered at the College campus at Teagasc Food Research Centre, Ashtown, Dublin 15.

Module Content

On completion of this module, students will be able to:

- Identify a range of machinery and hand tools
- Use a range of hand tools for soil cultivation
- Describe the working principles of engines used in horticulture
- Use a range of hand operated mowers
- Use a pedestrian operated rotary cultivator
- Use a hedge trimmer
- Use a strimmer
- Use a knapsack sprayer
- Service a diesel or two and four-stroke petrol engine

Duration

The course is offered on one day per week from January to March each year. Each session will comprise of lectures and hands-on practical / demonstration exercises. Skills learned throughout the programme will be assessed at regular intervals. Students will be provided with appropriate PPE but will be required to have safety boots and appropriate work trousers for each of the practical / demonstration session. Check with College for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Garden Design

Course Summary

Teagasc College of Amenity Horticulture provides a QQI Level 5 Component Award in Garden Design. It will equip the learner with the knowledge, skill and competence to devise basic garden designs using the principles of design. This course will lead to a minor award at NFQ Level 5 in Garden Design (5N2551).

Who Should Apply?

This course is suited to anyone with an interest in garden design and hand drafting skills. A wide range of drafting (hand-drawing) exercises will be covered. Students will be introduced to graphic techniques used in landscape plans – site survey, master plan, planting plan and sections. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture. This module will be delivered at the National Botanic Gardens.

Module Content

On completion of this module, students will be able to:

- Describe garden design elements
- Carry out a site survey
- Demonstrate graphic technique
- Draft a master plan
- Compile a planting plan
- Present a garden design and concept plan
- Implement safe work procedure

Duration

The course will be offered two days per week for 5 weeks from June to July. Skills learned during the course will be assessed by College personnel. Check with College for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

The QQI level 5 component award in Plant Science will equip the learner with the knowledge, skills and competence to understand plant structure, processes, growth and development in a horticultural context. This course will lead to a minor award at NFQ Level 5 in Plant Science (5N2528).

Who Should Apply?

It is suited for people who are currently pursuing careers in all of the various horticultural sectors or for those who feel they would like to explore this particular area of horticulture. This module offers participants a chance to study at the Teagasc College, National Botanic Gardens. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture.

Module Content

On completion of this module, students will be able to:

- Discuss plant anatomy.
- Illustrate secondary thickening
- Describe plant processes and their relationship with environmental factors
- Outline the life cycle and development of plants
- Describe the functions of plant hormones
- Apply Mendel's Law of inheritance
- Outline processes of conventional plant breeding
- Outline characteristics of micro-organisms
- Investigate the system of plant classification.

Duration

The course will be offered in one 3 hour session per week over a 28 week period commencing in early September and running through to mid-May. Students will be required to undertake class work and some laboratory work. It will be offered in the Teagasc College National Botanic Gardens. Course will be assessed through written theory exam and assignment. Check with College for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

The purpose of this award is to equip the learner with the knowledge, skill and competence to evaluate soils and growing media with regard to their utilisation in a horticultural context. This course will lead to a minor award at NFQ Level 5 in Soils Science and Growing Media (5N2530).

Who Should Apply?

It is suited for people who are currently pursuing careers in all of the various horticultural sectors or for those who feel they would like to explore this particular area of horticulture. This module offers participants a chance to study at the Teagasc College, National Botanic Gardens. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture.

Module Content

On completion of this module, students will be able to:

- Explain the origin of soils
- Investigate soil profiles and summarise soil groups
- Describe the physical characteristics of growing media
- Outline the chemical characteristics of growing media
- Outline soil fertility and plant nutrition
- Explain drainage
- Assess the physical and nutrient status of soils using safe working practices.

Duration

The course will be offered in one 3 hour session per week over a 28 week period commencing in early September and running through to mid-May. Students will be required to undertake class work and some laboratory work. It will be offered in the Teagasc College National Botanic Gardens. Course will be assessed through written theory exam some skills work and an assignment. Check with College for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

The purpose of this award is to equip the learner with the knowledge, skill and competence to skilfully lead self and other people in work-related tasks and activities, in a paid or voluntary capacity. This course will lead to a minor award at NFQ Level 5 in Leadership (6N2191).

Who Should Apply?

This module offers participants a chance to study at the Teagasc College, National Botanic Gardens. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture.

Module Content

- Analyse the evolving role of leadership over time, to include current and past examples of good leadership and its impact on the turn of events
- Evaluate leadership styles and approaches in a range of public and private contexts, to include leadership dilemmas, the need for leadership in all aspects of life, and the impact of personal and public ethics, morals and values.
- Draw up a personal leadership plan for a task, project or job, to include oral presentations, listening skills, making suggestions and giving feedback, written documents and correspondence.
- Demonstrate problem-solving skills, to include strategic analysis of issues or problems, action plans, execution of plans and evaluation of outcomes.
- Manage projects and tasks to include working with a team on a practical project or task that result in effective team performance.
- Handle group dynamics, to include facilitating the different roles that people play, conflict resolution, interacting with people who have diverse views and styles, teamwork and motivating others.
- Conduct meetings efficiently, to include use of appropriate meeting etiquette, procedures and processes in a particular public, private or voluntary context.
- Demonstrate leadership skills in a chosen environment, to include reflection on personal experience and progress.

Duration

The course will be offered in one 3 hour session per week over a 28 week period commencing in early September and running through to mid-May. Students will be required to undertake class work and group activities surrounding leadership events and learner records. Assessment will be by the completion of a learner record and skills assessment.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Landscape Construction & Maintenance

Course Summary

The QQI level 5 component award in Landscape Construction and Maintenance will equip the learner with the knowledge, skill and competence to plan, construct and maintain hard and soft landscape features. This course will lead to a minor award at NFQ Level 5 in Landscape Construction and Maintenance (5N1908).

Who Should Apply?

This course is designed for anyone interested or involved in planning and building of gardens or the care of plants. It is also suited for people who are currently pursuing careers in the landscape sector or for those who feel that they would like to explore this particular area of horticulture. This module offers participants a chance to study at the Teagasc College, National Botanic Gardens. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture.

Module Content

On completion of this module, students will be able to:

- Describe structural components and construction details
- Demonstrate pre-building skills using safe work practices
- Construct hard landscape features
- Plant a range of plants from plans
- Establish a lawn using seed and turf
- Devise an annual landscape maintenance programme

Duration

The course will be offered in one 3 hour session per week over a 28 week period commencing in early September and running through to mid-May. Each session will comprise of hands-on practical / demonstration exercises. Skills learned throughout the year will be assessed at regular intervals. Students will be provided with appropriate PPE but will be required to have safety boots and appropriate work trousers for each of the practical / demonstration session. Check with College for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

The QQI level 5 component award in Plant Identification and Use will equip the learner with the knowledge, skill and competence to identify a wide range of plants, their characteristics and their uses in different horticultural situations. This course will lead to a minor award at NFQ Level 5 in Plant Identification and Use (5N2527).

Who Should Apply?

This course is designed for anyone who wants to get involved in horticulture on a part-time basis while gaining an approved Level 5 minor award and for people who are currently working in other careers but who feel that they have always wanted to learn more about horticulture. This module offers participants a chance to study at the Teagasc College, National Botanic Gardens. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture.

Module Content

On completion of this module, students will be able to:

- Explain the binomial plant nomenclature system
- Explain technical plant terminology
- Identify a range of common plants at different stages
- Select suitable plants for different planting situations
- Plant a range of plants using safe working practices

Duration

The course will be offered in one 3 hour session per week over a 28 week period commencing in early September and running through to mid-May. Students will be required to undertake plant identification, select plants for a range of different planting situations and plant a range of plants according to accepted codes of practice and with regards to using safe working practices. Check with College for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Plant Propagation

Course Summary

The QQI level 5 component award in Plant Propagation will equip the learner with the knowledge, skill and competence for the propagation of a wide range of plants. This course will lead to a minor award at NFQ Level 5 in Plant Propagation (5N2547).

Who Should Apply?

This course is designed for anyone who wants to get involved in horticulture on a part-time basis while gaining an approved Level 5 minor award and for people who are currently working in other careers but who feel that they have always wanted to learn more about this very important aspect of horticulture. This module offers participants a chance to study at the Teagasc College, National Botanic Gardens. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture.

Module Content

On completion of this module, students will be able to:

- Outline the principles of plant propagation
- Outline the principles of division and layering
- Outline the principles of grafting
- Outline the principles of propagation from seed
- Describe the basic requirements for rooting cuttings
- Describe different systems used for cutting propagation
- Take a range of cuttings
- Prepare and sow seed
- Carry out routine division and layering
- Carry out bench grafting

Duration

The course will be offered in one 3 hour session per week over a 28 week period commencing in early September and running through to mid-May. Students will be required to take cuttings, prepare seed for sowing and carry out routine division and layering using safe work practices in the National Botanic Gardens. Skills learned during the course will be assessed regularly by College personnel.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

The QQI level 5 component award in Plant Protection will equip the learner with the knowledge, skill and competence to protect plants and horticultural crops from harmful effects of weeds, pests and diseases and to select appropriate, safe and sustainable control measures. This course will lead to a minor award at NFQ Level 5 in Plant Protection (5N2546).

Who Should Apply?

This course is designed for anyone involved in the management and care of plants. It is suited for people who are currently pursuing careers in all of the various horticultural sectors or for those who feel they would like to explore this particular area of horticulture. This module offers participants a chance to study at the Teagasc College, National Botanic Gardens. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture.

Note: On successful completion of this course, students will be fully qualified under DAFM Sustainable Use of Pesticides (SUD) legislation.

Module Content

On completion of this module, students will be able to:

- Describe the characteristics of common pest and disease-causing agents
- Review the effects, reproduction, spread and control of weeds
- Describe the range, formulations and uses of pesticides in horticulture
- Describe pest and disease control measures and legislative control practices
- Identify a range of horticulture pests and diseases
- Apply pesticides correctly with a knapsack sprayer

Duration

The course will be offered in one 3 hour session per week over a 28 week period commencing in early September and running through to mid-May. Each session will comprise of a period of lectures and a practical / demonstration session. Skills learned throughout the course will be assessed at regular intervals. Two short theory exams will be offered in December and again in May. Students will be provided with appropriate PPE but will be required to have safety boots and appropriate work trousers for each of the practical / demonstration session. Check with College for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

QQI Level 5- Component Award

Organic Crop Production

Course Summary

Teagasc College of Amenity Horticulture provides a QQI Level 5 Component Award in Organic Crop Production. It will equip the learner with the knowledge, skill and competence to practice organic crop production to approved organic standards in compliance with the EU and Irish regulations and legislation. This course will lead to a minor award at NFQ Level 5 in Organic Production (5N2549).

Who should Apply?

This course is designed for anyone who wants to deepen their knowledge of the production of organic crops or for those who just have a general interest in horticulture. It affords the opportunity to study an area of horticulture on a part-time basis while gaining an approved Level 5 minor award. By taking other Level 5 modules, students may be able to build towards a full award of QQI Certificate in Horticulture. This module will be delivered at the College campus at Teagasc, Ashtown, Dublin 15. Blended learning options will be available for virtual engagement of classroom teaching sessions. Practicals in all sessions must be attended for training and assessment.

Module Content

On completion of this module, students will be able to:

- Source organic input materials
- Examine markets and marketing of organic crops
- Design an organic crop rotation plan
- Compile a production programme
- Produce an organic crop

Duration

The course will be delivered one day per week over a 15 week period. Students will be required to perform a range of operations that are appropriate to organic crop production using safe work practices in the Teagasc Ashtown. Skills learned during the course will be assessed regularly by college personnel. Check with college for availability each year.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>



QQI Level 6 - Component Award Ecology & the Environment

Course Summary

The QQI level 6 component award in Ecology and the Environment will equip the learner with the knowledge, skill and competence to assist in the management of the natural environment. The course will lead to the component award at NFQ Level 6 in Ecology and the Environment (6N3645).

Who Should Apply?

This course is designed for anyone currently employed in any area of horticulture or related discipline who is interested in deepening both their scientific and applied knowledge of this very important area. On completion of this course, students can undertake further part-time courses in all of the various horticulture sectors. **Applicants must have 3 years' experience in a relevant area of horticulture or must hold a Level 5 Certificate in Horticulture and must provide a letter of recommendation from their current employer.** Applicants will be interviewed as part of the selection process.

Module Content

On completion of this module, students will be able to:

- Review policy framework for environmental & biodiversity in Ireland
- Appraise the role of statutory and voluntary organisations in environmental protection
- Apply techniques to promote biodiversity in the horticulture industry
- Evaluate factors influencing population dynamics community composition
- Examine habitat restoration techniques
- Report on a range of environmental features
- Assess habitats for biodiversity and quality using practical techniques
- Identify invasive species
- Devise a management plan to control an invasive species
- Ensure implementation of procedures to create and maintain a safe working environment

Course Structure

The course will be offered over a 16 week period commencing in early November and running through to early March in the National Botanic Gardens. Students will attend the College for 3 hours per week. Assessment of the course will be by means of two projects, a range of assignments and one theory exam.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Garden Centre Operations

Course Summary

The QQI level 6 component award in Garden Centre Operations will equip the learner with the knowledge, skill and competence to supervise operations in garden centres and other horticulture retail outlets. The course will lead to the component award at NFQ Level 6 in Garden Centre Operations (6N3609)

Who Should Apply?

This course is designed for current employees interested in deepening their scientific and applied knowledge of the retailing of plants and associated products. It is also suited to those already working in the plant retailing industry who would like to improve their knowledge and career opportunities within the sector. On completion of this course students can undertake further part-time courses such as Nursery Stock Production which is very complimentary to this course. **Applicants must have 3 years' experience in a relevant area of horticulture or must hold a Level 5 Certificate in Horticulture and must provide a letter of recommendation from their current employer.** Applicants will be interviewed as part of the selection process.

Module Content

On completion of this module, students will be able to:

- Evaluate the retail market for garden plants and products
- Analyse garden centre layout and customer flow patterns
- Examine product displays, promotion and public relations within the garden centre industry
- Explain the role of staff within the garden centre industry
- Apply routine skills necessary to display merchandise and maintain stock
- Apply knowledge of a wide range of garden products and services with a view to providing professional customer service
- Support the line manager

Course Structure

The course will be offered over a 16 week period commencing in early November and running through to early March in the National Botanic Gardens. Students will attend the College one or two days per week. Some days will involve on-site visits to support classroom learning. A work-based project will form part of the overall assessment.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

QQI Level 6 - Component Award

Landscape Design & Construction

Course Summary

The QQI level 6 component award in Landscape Design and Construction will equip the learner with the knowledge, skill and competence to design a landscape project and take that design to the detailed plan, specification and construction stage. The course will lead to the component award at NFQ Level 6 in Landscape Design and Construction (6N3620).

Who Should Apply?

This course is intended for those who are already employed in the landscape sector. It is particularly suited to those who have gained knowledge from previous study of horticulture or have relevant design and plant knowledge. The course will help to develop a better understanding of design principles of gardens and also how a range of garden features are constructed. **Applicants must have 3 years' experience in a relevant area of horticulture or must hold a Level 5 Certificate in Horticulture and must provide a letter of recommendation from their current employer.** Applicants will be interviewed as part of the selection process.

Module Content

On completion of this module, students will be able to:

- Analyse the landscape design process
- Appraise the principles and elements that underlie landscape design
- Evaluate a range of landscape design features and explain the importance and use of plant materials in design
- Evaluate structural components of landscape features and how they work together eg; walls, steps and paving
- Implement the design process in full for a given design including the building of a range of garden features

Course Structure

The course will be offered over a 24 week period commencing in early September and running through to early March in the National Botanic Gardens. The course will be delivered on 5 days per week in September and October and on 2 days per week thereafter, During this time students will develop a range of practical skills for garden design and construction as well as comprehensive drawing skills. These skills culminate in assignments in which the student will design a number of sites and build a garden from the ground up. A work-based project will form part of the overall assessment.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Market Gardening

Course Summary

The QQI level 6 component award in Market Gardening will equip the learner with the knowledge, skill and competence to plan and implement production programmes for a full range of fruit and vegetable crops. The course will lead to the component award at NFQ Level 6 in Market Gardening (6N3614).

Who Should Apply?

The course is designed for anyone already employed in the area of fruit and vegetable production, market gardening as well as garden centres where staff needs to be trained to answer questions from the public on all aspects of fruit and vegetable production. On completion of this course students can undertake further part-time courses that are complimentary to this course.

Applicants must have 3 years' experience in a relevant area of horticulture or must hold a Level 5 Certificate in Horticulture and must provide a letter of recommendation from their current employer. Applicants will be interviewed as part of the selection process.

Module Content

On completion of this module, students will be able to:

- Explain current regulations regarding protection of waters against pollution
- Describe quality assurance schemes and codes of practice relevant to the fresh produce supply chain
- Explain the regulatory system for plant protection and biocidal products
- Examine the production of plants for transplanting
- Examine crop production techniques
- Design a crop schedule for a range of crops
- Devise an integrated pest and disease management plan
- Identify relevant pests and diseases
- Cultivate a range of crops including all necessary routine skills
- Investigate new crops and technologies relevant to market gardening
- Implement procedures to create and maintain a safe working environment

Course Structure

The course will be offered over a 16 week period commencing in early November and running through to early March in the National Botanic Gardens. Students will attend the College one or two days per week. Some days will involve on-site visits to support classroom learning. A work-based project will form part of the overall assessment.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

The QQI level 6 component award in Nursery Stock Production will equip the learner with the knowledge, skill and competence to perform operations in a nursery stock plant production unit. The course will lead to the component award at NFQ Level 6 in Nursery Stock Production (6N3614).

Who Should Apply?

This course is designed for current employees interested in deepening both their scientific and applied knowledge of professional plant propagation. It is suited to those already working in the industry who would like to improve their knowledge and career opportunities within the sector. On completion of this course students can undertake further part-time courses that are complimentary to this course. **Applicants must have 3 years' experience in a relevant area of horticulture or must hold a Level 5 Certificate in Horticulture and must provide a letter of recommendation from their current employer.** Applicants will be interviewed as part of the selection process.

Module Content

On completion of this module, students will be able to:

- Plan a crop production programme for a range of crops such as:
 - Bedding plants, Open ground trees and shrubs, Containerised trees and shrubs
- Perform cultural techniques such as:
 - Taking cuttings, Pruning and staking, Pricking out, Preparing compost mix for various container crops, Potting on
- Recognise crop specific pests, diseases and weeds and develop appropriate control programmes
- Appreciate current plant health, import / export regulations

Course Structure

The course will be offered over a 16 week period commencing in early November and running through to early March in the National Botanic Gardens. Students will attend the College one or two days per week. A work-based project will form part of the overall assessment.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

The QQI level 6 component award in Sportsturf Science and Maintenance will equip the learner with the knowledge, skill and competence to manage all of the factors that influence the development, quality and maintenance of sportsturf in Ireland. The course will lead to the component award at NFQ Level 6 in Sportsturf Science and Maintenance (6N3623).

Who Should Apply?

The course is designed for anyone already employed in the area of sportsturf management, in particular golf courses, sports fields/pitches, equestrian or any other facility using natural turf. It is particularly suited to those who are embarking on a career in sportsturf and who wish to develop a greater understanding of the sciences underpinning all aspects of sportsturf maintenance. On completion of this course students can undertake further part-time courses that are complimentary to this course. **Applicants must have 3 years' experience in a relevant area of horticulture or must hold a Level 5 Certificate in Horticulture and must provide a letter of recommendation from their current employer.** Applicants will be interviewed as part of the selection process.

Module Content

On completion of this module, students will be able to:

- Appraise soil physical and chemical characteristics and evaluate soil hydrology
- Understand the growth and development of grass
- Assess meteorological effects on the development of grass
- Identify pests, diseases and weeds and implement IPM practices
- Formulate nutritional programmes for turfgrass systems
- Manage turfgrass and safely operate turf maintenance equipment
- Recognise safe working practices in turfgrass facilities

Course Structure

The course will be offered over a 16 week period commencing in early November and running through to early March in the National Botanic Gardens. Students will attend the College one or two days per week. A work-based project will form part of the overall assessment.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses/>

Course Summary

The QQI level 6 component award in Tree and Shrub Management will equip the learner with the knowledge, skill and competence in the selection, planning and maintenance of trees and shrubs. The course will lead to the component award at NFQ Level 6 in Tree and Shrub Management (6N3624).

Who Should Apply?

This course is designed for anyone involved in the selection, establishment and care of trees and shrubs. It is suited for people who are currently working in parks or garden management or in other horticultural enterprises such as nurseries, garden centres or sportsturf facilities which may involve the management of woody vegetation. On completion of this course students can undertake further part-time courses that are complimentary to this course. **Applicants must have 3 years' experience in a relevant area of horticulture or must hold a Level 5 Certificate in Horticulture and must provide a letter of recommendation from their current employer.** Applicants will be interviewed as part of the selection process.

Module Content

On completion of this module, students will be able to:

- Evaluate methods of establishing and managing trees and shrubs
- Explain current legislation and codes of practice relating to trees
- Select appropriate species for a range of situations
- Appraise tree and shrub stock for hazards and suggest appropriate actions
- Explain the response of trees to wounding and its implications for management
- Apply the necessary skills in relation to planning and aftercare of trees and shrubs
- Assess protection requirements for retained trees on development sites
- Identify a broad range of trees and shrubs
- Implement procedures to create and maintain a safe working environment

Course Structure

The course will be offered on two 3 hour sessions per week over a 16 week period commencing in early November and running through to early March in the National Botanic Gardens. The course will comprise of a combination of lectures, plant identification and practical sessions. Skills learned throughout the year will be assessed at regular intervals. Two exams are offered in December and again in March.

See Teagasc website for this course application at:

<https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/part-time-courses>

General Information & Contact Details

How to Apply for our Courses

Please note that it is recommended that students should possess a current, up to date, *Safe Pass*. A full Drivers License is also recommended.

Application for our courses is online at our website at:

<https://www.teagasc.ie/education/going-to-college/apply-online/horticulture-courses/>

Please follow the steps and complete **all sections**.

To apply a candidate will need to upload three forms of identification

1. PPS number
2. Birth Certificate (EU Resident), Non-EU Passport & Birth Certificate
3. ID Photo (this should be a clear image and show head and shoulders of the candidate)

We cannot process your application unless all relevant documentation and information is provided.

Please note when applying for a Component Level 6 course a person should also submit a copy of their QQI Level 5 Certificate in Horticulture or a letter of recommendation from a current employer where you have served 3 years plus as an employee. Level 6 Component students are interviewed as part of the selection process.

Information on all our courses is online <https://www.teagasc.ie/education/teagasc-colleges/botanic-gardens/> or alternatively you can contact our office at:

Teagasc College of Amenity Horticulture

The National Botanic Gardens,
Botanic Avenue,
Dublin 9.

Telephone: 01 804 0201

Email: botanic.college@teagasc.ie

How to achieve a full Level 5 qualification

To achieve a full level 5 qualification a person would have to reach 120 credits in each level (please see tables below). By taking the option to do single subject component awards a person can build modules to reach the full qualification.

List of Modules required for Full Major Award QQI Level 5

Teagasc Code	QQI Code	Mandatory	Credits
CH001	5N2546	Plant Protection	15
CH002	5N2528	Plant Science	10
CH003	5N2527	Plant ID and Use	10
CH004	5N2530	Soil Science and Growing Media	10
CH005	5N1433	Work Practice	15
LP01	6N2191	Leadership	15

Teagasc Code	QQI Code	Electives as Offered by Teagasc	Credits
CH008	5N2547	Plant Propagation- (Mandatory)	15
CH009	5N2552	Fruit & Vegetable Production	15
CH010	5N2551	Garden Design	15
CH011	5N1908	Landscape Construction & Maintenance	15
CH019	5N2431	Turfgrass Establishment & Maintenance	15
CH020	5N2559	Horticulture Mechanisation	15

How to achieve a full Level 6 qualification

To achieve a full level 6 qualification a person would have to reach 120 credits in each level (please see tables below). By taking the option to do single subject component awards a person can build modules to reach the full qualification.

List of Modules required for Full Major Award QQI Level 6

QQI Level 6 Streams – Students select one stream and take appropriate modules			
Landscaping	Nursery Stock	Sports Turf	Food Production
Landscape Design & Construction	Nursery Stock Production	Sports Turf Science and Maintenance	Market Gardening
Garden and Parks Supervision	Garden Centre Operations	Garden and Parks Supervision	Horticulture Production Mechanisation
Leadership or Customer Service	Leadership or Customer Service	Leadership or Customer Service	Leadership or Customer Service
Supervisory Skills	Supervisory Skills	Supervisory Skills	Supervisory Skills
Ecology and the Environment	Ecology and the Environment	Ecology and the Environment	Ecology and the Environment
Tree & Shrub Management	Tree & Shrub Management	Tree & Shrub Management	Sustainable Horticulture
Course Work			
24 weeks	16 weeks	16 weeks	16 weeks
Practical Learning Period (PLP)			
8 weeks	16 weeks	16 weeks	16 weeks

Our students come from a wide variety of backgrounds including both school leavers and adults who are looking to change career. We welcome all students from all backgrounds who have a passion for horticulture and wish to engage in seeking employment in the field of horticulture. All students of Glasnevin become part of a large community of learners that have trained in the National Botanic Gardens and develop lifelong friends and colleagues as a result of their time spent there.

Opportunities

Work opportunities in the Hort sector are very strong currently. Jobs in Landscaping, nurseries, garden centres, golf courses and in the commercial food sector are available to students. We have found through student surveys that up to 88% of students got employment within three months after graduating from the college in the Hort sector. This is a very positive indicator of what employment opportunities are available in Horticulture currently.

Work Experience

As horticulture is a very practical discipline we have a period of work placement built in to the delivery on each of our full time programs. We are fortunate that the National Botanic Gardens is a close partner that facilitates our students on their work experience. The students work side by side with the gardening staff on the grounds in first year of their program. We also have a large number of host companies that take students as part of their work experience in the degree program in year two. These companies are spread across the Hort sectors in landscape, nursery, amenity and commercial areas.

Industry Links

Each year we hold a career's fair in the college in March which allows students to connect with industry and network about possible employment opportunities when they graduate. Companies from each of the major disciplines are represented and talk to students about prospective employment in their respective areas. The college through its placement links would have a large network of industry links which serves as a very strong resource when promoting employment opportunities with students.

Building/Location

Our college is located on the grounds of the National Botanic Gardens in Glasnevin and Ashtown. We have new classrooms, science laboratory, drawing studio and computer suite. Students have access to the botanic library and a designated study area

Facilities

The facilities at the college include student and staff canteen, library, computer room, laboratory, study facilities, fully equipped lecture rooms and drawing studio. Wi-Fi is available in the main college buildings. In addition to the full facility of the Botanic gardens itself the college has particular facilities for training in horticultural practice and skills.

Clubs & Societies

When students attend courses at the Gardens they become part of all the activities of the National Botanic Gardens. The Botanic Gardens visitor centre has an all year round program of horticultural lectures and exhibitions at which all students are welcome. Various botanical and horticultural societies hold events in the National Botanic Gardens.

Accommodation

The College of Amenity horticulture is a non-residential college. Students acquire accommodation in the vicinity of the Botanic Gardens. An accommodation list is available from the college. Good opportunities for accommodation are available on many web sites and in the daily newspapers. It is best to seek such accommodation well in advance of the start of the college year.

Fees and Grants

All current fees are available directly from College.

Teagasc Student Maintenance Grant Scheme (TSMGS)

The grant is a means tested grant for students attending level 5 and level 6 courses at Teagasc.

Students Universal Support Ireland (SUSI)

The Level 7 Bsc in Horticulture is eligible for Third Level Training grants. The grant application form is at www.susi.ie

Student Supports

Teagasc is an equal opportunities organisation and welcomes applications from students which may have a disability or specific learning difficulties. Teagasc is committed to supporting all students, including those with disabilities or specific learning difficulties within their learning environment.

Transport Links

TEAGASC – BOTANIC GARDENS

By Bus: Route 4, 9, 83

For any other starting points in Dublin, use www.hittheroad.ie where you can find links for Dublin Bus, Luas and DART routes.

Accessible by car – ample parking available on site

TEAGASC – ASHTOWN, DUBLIN 15

Accessible by car – ample free parking available on site

Dublin Bus 120, 37, 39, 38, 39A and 70

Train - Longford, Maynooth, Castleknock, Ashtown and finish at Connolly.



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National Botanic Gardens,
Glasnevin,
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D09 VY63

Tel: +353 1 8040201

Email: botanic.college@teagasc.ie

Web: www.teagasc.ie/botanicgardens



AGRICULTURE AND FOOD DEVELOPMENT AUTHORITY